

Claim Rejections- 35 USC §102

Claim 9 stands rejected under 35 U.S.C. 102(b) as being anticipated by Tsuneda (US Patent 3,977,983).

This rejection has been rendered moot by the cancellation of claim 9. Moreover, none of new claims 30-45 is anticipated by Tsuneda at least for the reason that they require the addition of a charge director. As Tsuneda does not disclose or suggest the addition of a charge director, Tsuneda cannot anticipate or render obvious claims 30-45.

Claim Rejections- 35 USC §103

Claims 1, 3 and 9-13 stand rejected under 35 USC 103(a) as being unpatentable over EP 176 630 ("EP '630") in view of Whitbread (US Patent 3,325,409) further in view of *Handbook of Imaging Materials to Diamond*, Metcalfe (US Patent 3,078,231) and Wagner (US Patent 3,438,904).

Claims 1, 3 and 9-13 have been canceled, rendering this rejection moot. To the extent that this rejection may be applied to new claims 30-45, Applicants respectfully traverse the rejection for the following reasons.

EP '630 describes a method of producing a toner particle in which a *pigment* is encapsulated in an ionomer to form toner particles. The particles are then used as a toner. According to the Examiner, "the ionomer enhances the chargeability of the pigment particles by giving stability to the toner charge. (EP pp. 1-2)".

As noted by the Examiner, EP '630 does not disclose pigmented polymer as recited by Applicant, nor does EP '630 disclose a charge director. EP '630 discloses at page 11, beginning at the fifth paragraph, that the coloring substance used in the toner particles may be an inorganic pigment or solid organic dyestuff pigment commonly employed in liquid electrostatic toner compositions. Thus, EP '630 does not disclose or suggest a method for making a liquid toner comprising coating pigmented polymer particles with an ionomer. Nor does EP '630 disclose or suggest the addition of a charge director to the coated pigmented polymer particles.

Whitbread describes a method of making a liquid toner comprising mixing an ester of a hydrogenated rosin and a pigment and dispersing the mixture in a non-polar liquid carrier. Thus, Whitbread discloses toner particles that comprise esters of hydrogenated rosins as binders for pigments. Whitbread does not disclose or suggest a method of making a liquid toner comprising coating pigmented polymer particles with at least one ionomer. Nor does Whitbread disclose or suggest adding at least one charge director to coated pigmented polymer particles.

Metcalf, Diamond and Wagner are all cited for their disclosures regarding charge directors and image enhancing agents.

According to the Examiner it would have been obvious to substitute the pigment of Whitbread for the pigment in EP '630 because:

Whitbread discloses the hydrogenated rosin/pigment mixture as providing high contrast images, which are scuff resistant when dried. The artisan would recognize that the resin coating in the European document is applied to the pigment to impart the desired charge to a pigment particle (paragraph spanning pp. 1-2; note a similar principle in Metcalf) and thus the artisan would reasonably conclude that the charge on the pigment particle of Whitbread would be controlled by the ionomer resin coating of the European document. Thus, the artisan would obtain by the combination high contrast images, which are scuff resistant while obtaining the charge characteristics of the European document.

The Examiner further states that it would have been obvious to add a charge director to the modified pigment particle because:

Diamond discloses charge directors are well known components to produce the desired charge on the toner. The addition of the ionomer resin to the pigment in the European document (EP p. 13) would have been expected to differ the charge polarity of the pigment because these components would change the surface charging characteristics of the pigment (see Wagner col. 5, l. 37-42).

Applicants respectfully disagree with the Examiner's conclusions. There is no motivation for one of ordinary skill in the art to incorporate a toner that is complete and useful by itself as the pigment of EP '630. Thus, any combination of the prior art, does suggest the present invention which requires producing a layered particle including an inner layer which comprises a pigmented polymer (not a pigment) and an outer layer of ionomer. Applicants invention resides in the use of an ionomer coating on a pigmented polymer particle. This enables better charging of a basically unchargeable polymer particle with a charge director. As a result of the invention, the core of the toner particles comprises a pigmented polymer chosen for its physical properties (abrasion resistance, adhesion, etc.), while the surface coating comprises an ionomer that is easily chargeable but which need not have the physical properties generally required of polymers used for toner particles. The prior art does not suggest a method of making a liquid toner that allows for the great flexibility in choosing materials that is realized with the toners of the invention. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Double Patenting

Claim 2 stands rejected under 35 USC 101 as claiming the same invention as that of claim 17 of U.S. Patent 6,337,168. This rejection is moot since claim 2 has been canceled.

Claims 1, 3 and 9-13 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-32 of U.S. Patent 6,337,168. This rejection is moot as claims 1, 3 and 9-13 have been canceled.

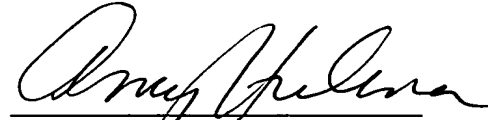
If necessary, Applicants will consider filing a terminal disclaimer upon indication of allowable subject matter.

Applicants respectfully submit that none of the claims is anticipated by or rendered obvious over the references of record. Applicants believe that the present application is in condition for allowance. Accordingly, favorable consideration and allowance of this application are requested.

The Examiner is invited to contact the undersigned at (202) 220-4369 to discuss any matter concerning this application.

Respectfully submitted,

KENYON & KENYON

A handwritten signature in cursive script, appearing to read "Amy L. Hefina", written over a horizontal line.

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